The following statistical brief was prepared by the Division of Modeling and Simulation, Center for Cost and Financing Studies, Agency for Health Care Policy and Research. For more information, contact us through E-mail at mepspd@ahcpr.gov

September 7, 1999

The Distribution of Projected Health Care Expenditures, 1999

The distribution of personal health expenditures for the civilian, non-institutionalized population in the United States is extremely uneven. A very small proportion of individuals in this population accounts for a substantial majority of the projected \$845 billion in health expenditures for this estimated population of 273 million persons in 1999. To illustrate this, the projected data show that the top10 percent of the civilian, non-institutionalized population in 1999 account for 73 percent of this group's health care expenditures (Chart 1/Table 1). The distribution of health expenditures for the elderly portion of this population is less skewed than that of the non-elderly. The top 10 percent of the elderly distribution account for 65 percent of the total \$297 billion in health expenditures projected for the 32 million elderly in 1999 (Chart 2/Table 2). By contrast, the top 10 percent of the 240 million non-elderly population with the highest expenditures are estimated to command 70 percent of the \$548 billion in total health spending projected for this population (Chart 3/Table 3).

After restricting this population to non-elderly persons with private health insurance coverage and grouping them together into 75 million units estimated to be covered by the same policy, 55 percent of the projected \$395 billion in health expenditures for this group are accounted for by the top10 percent of these units at the high end of the distribution (Chart 4/Table 4).³ Of the \$179 billion in health expenditures attributed to the remaining 90 percent of this population, approximately 29 percent of these expenditures or \$51 billion are estimated to be paid out of pocket (Table 5).

¹The projected expenditure data are based on the 1987 National Medical Expenditure Survey data after they are reweighted and aligned to 1999 population and national health expenditure projections—see "Data from the 1987 NMES Household Survey Projected to 1996-2005: Medical Expenditures by Type of Service and Payment Source, Demographics, and Poverty and Insurance Status: Release B (1996-2005), Data File Documentation," August 1998. This paper is available on the AHCPR web site under Projected Health Spending section (http://www.meps.ahcpr.gov/nmes/data/nmes95/doc9605c.pdf).

²The actual 1987 size distribution of NMES expenditures is published in Berk, M. and A. Monheit, "The Concentration of Health Expenditures: An Update," *Health Affairs*, 11(4) 1992: pp. 145-149.

³The health insurance unit consists of persons who could potentially be covered by a family health insurance policy according to industry-wide standards and is roughly equivalent to a nuclear family grouping (mother, father, and dependent children).

In all four populations, about one half of the expenditures not made by the highest 10 percent of the distribution were made by the next highest 10 percent of each population (Charts 1-4).

Chart 1: Share of Health Care Expenditures by Civilian, Non-Institutionalized Population: Projected for 1999

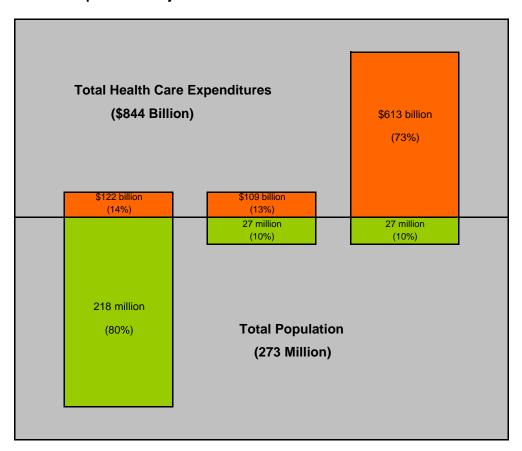


Table 1: Size Distribution of Projected Health Expenditures: Civilian, Non-institutionalized Population, 1999

	2%	4%	6%	8%	10%
Per Capita Total Health Expenditures	0	0	0	0	0
Total Health Expenditures (\$ billions)	0	0	0	0	0
Cumulative Total Health Expenditures(\$ billions)	0	0	0	0	0
Number of Persons (Millions)	5.451	5.451	5.451	5.451	5.451
Cumulative Number of Persons (Millions)	5.451	10.902	16.352	21.803	27.254
	12%	14%	16%	18%	20%
Per Capita Total Health Expenditures	0	0	0	21.833	44.729
Total Health Expenditures (\$ billions)	0	0	0	0.119	0.244
Cumulative Total Health Expenditures(\$ billions)	0	0	0	0.119	0.363
Number of Persons (Millions)	5.451	5.451	5.451	5.451	5.451
Cumulative Number of Persons (Millions)	32.705	38.156	43.606	49.057	54.508
	22%	24%	26%	28%	30%
Per Capita Total Health Expenditures	61.827	83.03	103.864	126.534	151.402
Total Health Expenditures (\$ billions)	0.337	0.453	0.566	0.69	0.825
Cumulative Total Health Expenditures(\$ billions)	0.7	1.152	1.719	2.408	3.234
Number of Persons (Millions)	5.451	5.451	5.451	5.451	5.451
Cumulative Number of Persons (Millions)	59.959	65.41	70.86	76.311	81.762
	32%	34%	36%	38%	40%
Per Capita Total Health Expenditures	176.454	201.729	229.962	257.679	288.826
Total Health Expenditures (\$ billions)	0.962	1.1	1.253	1.405	1.574
Cumulative Total Health Expenditures(\$ billions)	4.195	5.295	6.548	7.953	9.527
Number of Persons (Millions)	5.451	5.451	5.451	5.451	5.451
Cumulative Number of Persons (Millions)	87.213	92.664	98.114	103.565	109.016
	42%	44%	46%	48%	50%
Per Capita Total Health Expenditures	325.113	362.828	403.27	446.48	495.195
Total Health Expenditures (\$ billions)	1.772	1.978	2.198	2.434	2.699
Cumulative Total Health Expenditures(\$ billions)	11.299	13.277	15.475	17.909	20.608
Number of Persons (Millions)	5.451	5.451	5.451	5.451	5.451
Cumulative Number of Persons (Millions)	114.467	119.918	125.368	130.819	136.27

	52%	54%	56%	58%	60%
Per Capita Total Health Expenditures	554.049	612.544	674.676	742.714	821.432
Total Health Expenditures (\$ billions)	3.02	3.339	3.678	4.048	4.477
Cumulative Total Health Expenditures(\$ billions)	23.628	26.967	30.645	34.693	39.17
Number of Persons (Millions)	5.451	5.451	5.451	5.451	5.451
Cumulative Number of Persons (Millions)	141.721	147.172	152.622	158.073	163.524
	62%	64%	66%	68%	70%
Per Capita Total Health Expenditures	900.632	990.304	1089.528	1206.01	1347.038
Total Health Expenditures (\$ billions)	4.909	5.398	5.939	6.574	7.342
Cumulative Total Health Expenditures(\$ billions)	44.08	49.477	55.416	61.99	69.332
Number of Persons (Millions)	5.451	5.451	5.451	5.451	5.451
Cumulative Number of Persons (Millions)	168.975	174.426	179.876	185.327	190.778
	72%	74%	76%	78%	80%
Per Capita Total Health Expenditures	1505.287	1684.783	1903.845	2169.729	2468.935
Total Health Expenditures (\$ billions)	8.205	9.183	10.377	11.827	13.458
Cumulative Total Health Expenditures(\$ billions)	77.537	86.721	97.098	108.925	122.383
Number of Persons (Millions)	5.451	5.451	5.451	5.451	5.451
Cumulative Number of Persons (Millions)	196.229	201.68	207.13	212.581	218.032
	82%	84%	86%	88%	90%
Per Capita Total Health Expenditures	2830.995	3271.376	3851.108	4576.513	5491.665
Total Health Expenditures (\$ billions)	15.431	17.832	20.992	24.946	29.934
Cumulative Total Health Expenditures(\$ billions)	137.814	155.646	176.637	201.583	231.517
Number of Persons (Millions)	5.451	5.451	5.451	5.451	5.451
Cumulative Number of Persons (Millions)	223.483	228.934	234.384	239.835	245.286
	92%	94%	96%	98%	100%
Per Capita Total Health Expenditures	6789.921	9044.753	12568.715	20725.84	63398.271
Total Health Expenditures (\$ billions)	37.011	49.301	68.51	112.972	345.571
Cumulative Total Health Expenditures(\$ billions)	268.527	317.829	386.338	499.311	844.882
Number of Persons (Millions)	5.451	5.451	5.451	5.451	5.451
Cumulative Number of Persons (Millions)	250.737	256.188	261.638	267.089	272.54

Chart 2: Share of Health Care Expenditures by Elderly (65+) Civilian, Non-Institutionalized Population: Projected for 1999

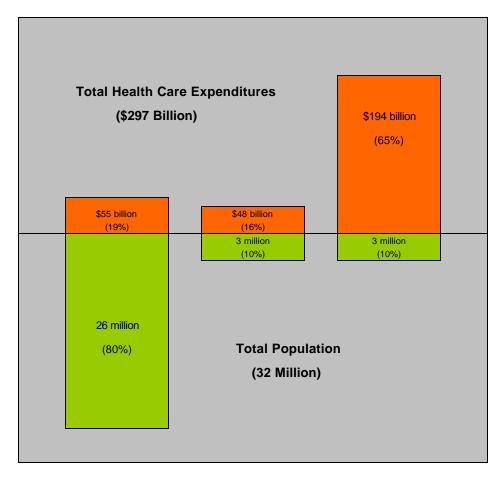


Table 2: Size Distribution of Projected Health Expenditures: Elderly (65+) Civilian, Non-Institutionalized Population, 1999

	2%	4%	6%	8%	10%
Per Capita Total Health Expenditures	0	0	0.005	38.458	87.044
Total Health Expenditures (\$ Billions)	0	0	0	0.025	0.056
Cumulative Total Health Expenditures(\$ Billions)	0	0	0	0.025	0.081
Number of Persons (Millions)	0.646	0.646	0.646	0.646	0.646
Cumulative Number of Persons (Millions)	0.646	1.293	1.939	2.586	3.232
	12%	14%	16%	18%	20%
Per Capita Total Health Expenditures	139.127	197.877	258.593	324.184	386.089
Total Health Expenditures (\$ Billions)	0.09	0.128	0.167	0.21	0.25
Cumulative Total Health Expenditures(\$ Billions)	0.171	0.299	0.466	0.676	0.925
Number of Persons (Millions)	0.646	0.646	0.646	0.646	0.646
Cumulative Number of Persons (Millions)	3.879	4.525	5.172	5.818	6.465
	22%	24%	26%	28%	30%
Per Capita Total Health Expenditures	445.523	529.717	607.086	680.908	762.425
Total Health Expenditures (\$ Billions)	0.288	0.342	0.392	0.44	0.493
Cumulative Total Health Expenditures(\$ Billions)	1.213	1.556	1.948	2.389	2.881
Number of Persons (Millions)	0.646	0.646	0.646	0.646	0.646
Cumulative Number of Persons (Millions)	7.111	7.758	8.404	9.051	9.697
Carrialative (valider of a creatic (validerie)	7	7.700	0.101	0.001	0.007
	32%	34%	36%	38%	40%
Per Capita Total Health Expenditures	842.223	935.276	1020.613	1111.013	1208.644
Total Health Expenditures (\$ Billions)	0.544	0.605	0.66	0.718	0.781
Cumulative Total Health Expenditures(\$ Billions)	3.426	4.031	4.69	5.409	6.19
Number of Persons (Millions)	0.646	0.646	0.646	0.646	0.646
Cumulative Number of Persons (Millions)	10.344	10.99	11.637	12.283	12.93
	42%	44%	46%	48%	50%
Per Capita Total Health Expenditures	1319.487	1433.333	1548.223	1683.734	1843.208
Total Health Expenditures (\$ Billions)	0.853	0.927	1.001	1.089	1.192
Cumulative Total Health Expenditures(\$ Billions)	7.043	7.97	8.971	10.059	11.251
Number of Persons (Millions)	7.043 0.646	7.97 0.646	0.646	0.646	0.646
, ,					16.162
Cumulative Number of Persons (Millions)	13.576	14.223	14.869	15.516	10.162

	52%	54%	56%	58%	60%
Per Capita Total Health Expenditures	2003.909	2189.293	2391.955	2622.963	2849.713
Total Health Expenditures (\$ Billions)	1.296	1.415	1.546	1.696	1.842
Cumulative Total Health Expenditures(\$ Billions)	12.546	13.962	15.508	17.204	19.046
Number of Persons (Millions)	0.646	0.646	0.646	0.646	0.646
Cumulative Number of Persons (Millions)	16.809	17.455	18.102	18.748	19.395
	62%	64%	66%	68%	70%
Per Capita Total Health Expenditures	3140.601	3506.961	3924.514	4380.425	4912.233
Total Health Expenditures (\$ Billions)	2.03	2.267	2.537	2.832	3.176
Cumulative Total Health Expenditures(\$ Billions)	21.077	23.344	25.881	28.713	31.889
Number of Persons (Millions)	0.646	0.646	0.646	0.646	0.646
Cumulative Number of Persons (Millions)	20.041	20.688	21.334	21.981	22.627
	72%	74%	76%	78%	80%
Per Capita Total Health Expenditures	5594.595	6277.582	7045.663	7971.732	9178.58
Total Health Expenditures (\$ Billions)	3.617	4.058	4.555	5.154	5.934
Cumulative Total Health Expenditures(\$ Billions)	35.505	39.564	44.119	49.273	55.207
Number of Persons (Millions)	0.646	0.646	0.646	0.646	0.646
Cumulative Number of Persons (Millions)	23.274	23.92	24.567	25.213	25.86
	82%	84%	86%	88%	90%
Per Capita Total Health Expenditures	10478.499	12191.874	14517.437	16940.965	20543.208
Total Health Expenditures (\$ Billions)	6.774	7.882	9.385	10.952	13.281
Cumulative Total Health Expenditures(\$ Billions)	61.981	69.863	79.248	90.2	103.482
Number of Persons (Millions)	0.646	0.646	0.646	0.646	0.646
Cumulative Number of Persons (Millions)	26.506	27.153	27.799	28.446	29.092
	92%	94%	96%	98%	100%
Per Capita Total Health Expenditures	25690.15	32897.249	43436.262	62984.073	134815.36
Total Health Expenditures (\$ Billions)	16.609	21.268	28.081	40.719	87.157
Cumulative Total Health Expenditures(\$ Billions)	120.09	141.358	169.439	210.158	297.316
Number of Persons (Millions)	0.646	0.646	0.646	0.646	0.646
Cumulative Number of Persons (Millions)	29.739	30.385	31.032	31.678	32.325

Chart 3: Share of Health Care Expenditures by Non-Elderly (<65) Civilian, Non-Institutionalized Population: Projected for 1999

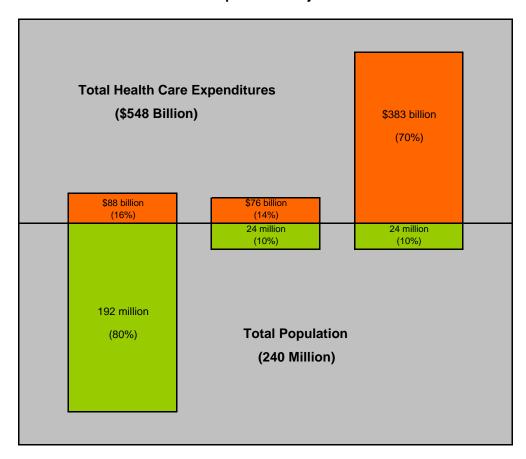


Table 3: Size Distribution of Projected Health Expenditures: Non-Elderly (<65) Civilian, Non-Institutionalized Population, 1999

	2%	4%	6%	8%	10%
Per Capita Total Health Expenditures	0	0	0	0	0
Total Health Expenditures (\$ Billions)	0	0	0	0	0
Cumulative Total Health Expenditures(\$ Billions)	0	0	0	0	0
Number of Persons (Millions)	4.804	4.804	4.804	4.804	4.804
Cumulative Number of Persons (Millions)	4.804	9.609	14.413	19.217	24.022
	12%	14%	16%	18%	20%
Per Capita Total Health Expenditures	0	0	0	3.169	29.596
Total Health Expenditures (\$ Billions)	0	0	0	0.015	0.142
Cumulative Total Health Expenditures(\$ Billions)	0	0	0	0.015	0.157
Number of Persons (Millions)	4.804	4.804	4.804	4.804	4.804
Cumulative Number of Persons (Millions)	28.826	33.63	38.434	43.239	48.043
	22%	24%	26%	28%	30%
Per Capita Total Health Expenditures	48.252	63.779	84.041	103.234	124.192
Total Health Expenditures (\$ Billions)	0.232	0.306	0.404	0.496	0.597
Cumulative Total Health Expenditures(\$ Billions)	0.389	0.696	1.099	1.595	2.192
Number of Persons (Millions)	4.804	4.804	4.804	4.804	4.804
Cumulative Number of Persons (Millions)	52.847	57.652	62.456	67.26	72.065
	32%	34%	36%	38%	40%
Per Capita Total Health Expenditures	146.982	170.941	192.965	219.397	244.795
Total Health Expenditures (\$ Billions)	0.706	0.821	0.927	1.054	1.176
Cumulative Total Health Expenditures(\$ Billions)	2.898	3.719	4.646	5.701	6.877
Number of Persons (Millions)	4.804	4.804	4.804	4.804	4.804
Cumulative Number of Persons (Millions)	76.869	81.673	86.478	91.282	96.086
	42%	44%	46%	48%	50%
Per Capita Total Health Expenditures	272.641	303.235	339.219	375.062	415.156
Total Health Expenditures (\$ Billions)	1.31	1.457	1.63	1.802	1.995
Cumulative Total Health Expenditures(\$ Billions)	8.186	9.643	11.273	13.075	15.069
Number of Persons (Millions)	4.804	4.804	4.804	4.804	4.804
Cumulative Number of Persons (Millions)	100.89	105.695	110.499	115.303	120.108

	52%	54%	56%	58%	60%
Per Capita Total Health Expenditures	457.655	505.395	563.273	619.603	681.435
Total Health Expenditures (\$ Billions)	2.199	2.428	2.706	2.977	3.274
Cumulative Total Health Expenditures(\$ Billions)	17.268	19.696	22.402	25.379	28.653
Number of Persons (Millions)	4.804	4.804	4.804	4.804	4.804
Cumulative Number of Persons (Millions)	124.912	129.716	134.521	139.325	144.129
	62%	64%	66%	68%	70%
Per Capita Total Health Expenditures	749.245	827.302	906.37	996.884	1098.598
Total Health Expenditures (\$ Billions)	3.6	3.975	4.354	4.789	5.278
Cumulative Total Health Expenditures(\$ Billions)	32.253	36.227	40.582	45.371	50.649
Number of Persons (Millions)	4.804	4.804	4.804	4.804	4.804
Cumulative Number of Persons (Millions)	148.934	153.738	158.542	163.346	168.151
	72%	74%	76%	78%	80%
Per Capita Total Health Expenditures	1221.267	1371.165	1539.875	1739.601	1983.808
Total Health Expenditures (\$ Billions)	5.867	6.587	7.398	8.358	9.531
Cumulative Total Health Expenditures(\$ Billions)	56.516	63.104	70.502	78.859	88.39
Number of Persons (Millions)	4.804	4.804	4.804	4.804	4.804
Cumulative Number of Persons (Millions)	172.955	177.759	182.564	187.368	192.172
	82%	84%	86%	88%	90%
Per Capita Total Health Expenditures	2283.287	2635.351	3052.269	3609.595	4317.454
Total Health Expenditures (\$ Billions)	10.97	12.661	14.664	17.342	20.742
Cumulative Total Health Expenditures(\$ Billions)	99.36	112.021	126.685	144.027	164.769
Number of Persons (Millions)	4.804	4.804	4.804	4.804	4.804
Cumulative Number of Persons (Millions)	196.977	201.781	206.585	211.389	216.194
	92%	94%	96%	98%	100%
Per Capita Total Health Expenditures	5261.695	6569.746	9199.41	14161.939	44485.155
Total Health Expenditures (\$ Billions)	25.279	31.563	44.197	68.038	213.72
Cumulative Total Health Expenditures(\$ Billions)	190.048	221.611	265.808	333.846	547.566
Number of Persons (Millions)	4.804	4.804	4.804	4.804	4.804
Cumulative Number of Persons (Millions)	220.998	225.802	230.607	235.411	240.215

Chart 4: Share of Health Care Expenditures by Health Insurance Units Containing Privately Insured, Civilian, Non-Institutionalized Population, 1999

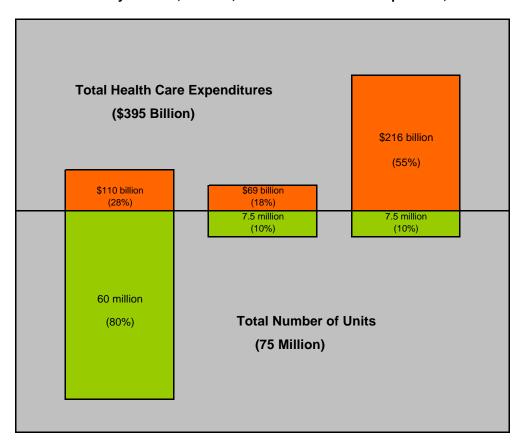


Table 4: Size Distribution of Projected Health Expenditures: Health Insurance Units containing Privately Insured, Civilian, Non-Institutionalized Population, 1999

	5%	10%	15%	20%	25%
Per Capita Total Health Expenditures	0	34.039	142.019	271.861	426.186
Total Health Expenditures (\$ Billions)	0	0.128	0.533	1.02	1.599
Cumulative Total Health Expenditures(\$ Billions)	0	0.128	0.661	1.681	3.28
Number of Units (Millions)	3.752	3.752	3.752	3.752	3.752
Cumulative Number of Units (Millions)	3.752	7.505	11.257	15.01	18.762
	30%	35%	40%	45%	50%
Per Capita Total Health Expenditures	603.748	812.308	1062.913	1355.642	1684.983
Total Health Expenditures (\$ Billions)	2.266	3.048	3.989	5.087	6.323
Cumulative Total Health Expenditures(\$ Billions)	5.546	8.594	12.582	17.669	23.992
Number of Units (Millions)	3.752	3.752	3.752	3.752	3.752
Cumulative Number of Units (Millions)	22.515	26.267	30.019	33.772	37.524
	55%	60%	65%	70%	75%
Per Capita Total Health Expenditures	55% 2074.506	60% 2581.677	65% 3188.034	70% 3958.568	75% 4889.834
Per Capita Total Health Expenditures Total Health Expenditures (\$ Billions)					
·	2074.506	2581.677	3188.034	3958.568	4889.834
Total Health Expenditures (\$ Billions) Cumulative Total Health Expenditures(\$ Billions) Number of Units (Millions)	2074.506 7.784 31.776 3.752	2581.677 9.688	3188.034 11.963	3958.568 14.854	4889.834 18.349 86.63 3.752
Total Health Expenditures (\$ Billions) Cumulative Total Health Expenditures(\$ Billions)	2074.506 7.784 31.776	2581.677 9.688 41.464	3188.034 11.963 53.427	3958.568 14.854 68.281	4889.834 18.349 86.63
Total Health Expenditures (\$ Billions) Cumulative Total Health Expenditures(\$ Billions) Number of Units (Millions)	2074.506 7.784 31.776 3.752	2581.677 9.688 41.464 3.752	3188.034 11.963 53.427 3.752	3958.568 14.854 68.281 3.752	4889.834 18.349 86.63 3.752
Total Health Expenditures (\$ Billions) Cumulative Total Health Expenditures(\$ Billions) Number of Units (Millions)	2074.506 7.784 31.776 3.752 41.277	2581.677 9.688 41.464 3.752 45.029	3188.034 11.963 53.427 3.752 48.782	3958.568 14.854 68.281 3.752 52.534	4889.834 18.349 86.63 3.752 56.286
Total Health Expenditures (\$ Billions) Cumulative Total Health Expenditures(\$ Billions) Number of Units (Millions) Cumulative Number of Units (Millions)	2074.506 7.784 31.776 3.752 41.277	2581.677 9.688 41.464 3.752 45.029	3188.034 11.963 53.427 3.752 48.782	3958.568 14.854 68.281 3.752 52.534	4889.834 18.349 86.63 3.752 56.286
Total Health Expenditures (\$ Billions) Cumulative Total Health Expenditures(\$ Billions) Number of Units (Millions) Cumulative Number of Units (Millions) Per Capita Total Health Expenditures	2074.506 7.784 31.776 3.752 41.277 80% 6148.899	2581.677 9.688 41.464 3.752 45.029 85% 7922.212	3188.034 11.963 53.427 3.752 48.782 90% 10512.618	3958.568 14.854 68.281 3.752 52.534 95% 15207.156	4889.834 18.349 86.63 3.752 56.286 100% 42339.756
Total Health Expenditures (\$ Billions) Cumulative Total Health Expenditures(\$ Billions) Number of Units (Millions) Cumulative Number of Units (Millions) Per Capita Total Health Expenditures Total Health Expenditures (\$ Billions)	2074.506 7.784 31.776 3.752 41.277 80% 6148.899 23.073	2581.677 9.688 41.464 3.752 45.029 85% 7922.212 29.728	3188.034 11.963 53.427 3.752 48.782 90% 10512.618 39.448	3958.568 14.854 68.281 3.752 52.534 95% 15207.156 57.064	4889.834 18.349 86.63 3.752 56.286 100% 42339.756 158.877

Table 5: Size Distribution of Projected Health Expenditures: Out-of-Pocket Expenditures by Health Insurance Units Containing Privately Insured Civilian, Non-Institutionalized Population, 1999

	5%	10%	15%	20%	25%
Per Capita Out-of-Pocket Health Expenditures	0	27.322	86.972	158.093	258.345
Total Out-of-Pocket Health Expenditures (\$ Billions)	0	0.103	0.326	0.593	0.969
Cumulative Out-of-Pocket Health Expenditures (\$ Billions)	0	0.103	0.429	1.022	1.992
Number of Units (Millions)	3.752	3.752	3.752	3.752	3.752
Cumulative Number of Units (Millions)	3.752	7.505	11.257	15.01	18.762
	30%	35%	40%	45%	50%
Per Capita Out-of-Pocket Health Expenditures	307.295	410.342	422.974	582.875	662.293
Total Out-of-Pocket Health Expenditures (\$ Billions)	1.153	1.54	1.587	2.187	2.485
Cumulative Out-of-Pocket Health Expenditures (\$ Billions)	3.145	4.684	6.272	8.459	10.944
Number of Units (Millions)	3.752	3.752	3.752	3.752	3.752
Cumulative Number of Units (Millions)	22.515	26.267	30.019	33.772	37.524
	55%	60%	65%	70%	75%
Per Capita Out-of-Pocket Health Expenditures	729.324	908.68	1045.014	1233.437	1292.18
Total Out-of-Pocket Health Expenditures (\$ Billions)	2.737	3.41	3.921	4.628	4.849
Cumulative Out-of-Pocket Health Expenditures (\$ Billions)	13.681	17.09	21.012	25.64)	30.489
Number of Units (Millions)	3.752	3.752	3.752	3.752	3.752
Cumulative Number of Units (Millions)	41.277	45.029	48.782	52.534	56.286
	80%	85%	90%	95%	100%
Per Capita Out-of-Pocket Health Expenditures	1576.117	1852.571	2107.18	2125.812	3214.532
Total Out-of-Pocket Health Expenditures (\$ Billions)	5.914	6.952	7.907	7.977	12.062
Cumulative Out-of-Pocket Health Expenditures (\$ Billions)	36.403	43.355	51.262	59.239	71.301
Number of Units (Millions)	3.752	3.752	3.752	3.752	3.752
Cumulative Number of Units (Millions)					